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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,160	06/13/2001	Luca Toncelli	SAIC 18.749	6155

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EXAMINER

BOYD, JENNIFER A

ART UNIT PAPER NUMBER

1771

DATE MAILED: 04/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,160

Examiner

Jennifer A Boyd

Applicant(s)

TONCELLI, LUCA

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Abstract

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Specification

2. The disclosure is objected to because of the following informalities: On page 3, the term NBR is not defined. Appropriate correction is required.

Claim Objections

3. Claim 2 is objected to because of the following informalities: Please write out the abbreviated terms “EPM”, “VKF” and “PU” as “ethylene and propylene copolymers”, “fluorocarbon rubbers” and “polyurethane rubbers”. Appropriate correction is required.
4. Claims 2 – 5 are objected to because of the following informalities: Please change the phrase “characterized in that” to “wherein”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Regarding claim 2, the addition of the word “type” to an otherwise definite expression extends the scope of the expression so as to render it indefinite. Likewise, the phrase “EPM or VFK or PU type” is held to be indefinite because it was unclear what “type” is intended to convey.

8. Claim 3 recites the limitation "the two – lower and upper – moulding sheaths" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim. For the sake of examination at this time, the Examiner will assume that the Applicant is referring to the two layers of rubber, or the “said two layers of rubber”, defined in claim 1. Appropriate corrections are required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis (US 4,744,843).

As to claim 1, Lewis teaches a method for producing conveyor belts or other molded articles (column 1, lines 10 – 12). In Figure 1, Lewis discloses a belt with nonwoven layers (1), elastomer layers (2) and woven layers (3) (column 1, lines 45 – 60). Lewis teaches a belt structure comprising a woven layer (3), equated to the “layer of non-deformable cloth or fabric”, interposed between two elastomer layers (2), equated to the Applicant’s “layers of rubber”. A

second woven layer (3), equated to the “second layer of non-deformable cloth or fabric”, is adhered to the base of the above described structure.

As to claim 3, Lewis indicates the elastomer layers as (3) and gives no indication otherwise that the two elastomer layers vary in any sort of form. Therefore, it is assumed that the two rubber layers are of the same composition, therefore, they have the same heat transfer properties.

As to claims 1 and 5, Lewis teaches that the molded article is cured at a temperature between 90 – 165 degrees Celsius for about 15 to 90 minutes depending on the cure recipe and thickness (column 2, lines 4 – 8).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis (US 4,744,843) in view of Stijntjes et al. (US 4,839,220).

Lewis fails to teach the specific type of elastomer and the structure of the woven material used in the molded article.

Stijntjes et al. teaches a conveyor belt comprising a covering layer (1), a lower covering layer (2) and an intermediate layer (3) separating the two fabrics (4) and (5) being embedded in the conveyor belt. Stijntjes discloses that the covering layers and the intermediate layer can

consist of polyurethane. Stijntjes teaches that the embedded fabrics have a weft of two or more twisted monofilament threads composed of polyester, polyamide or such like materials (column 1, lines 34 – 39). Stijntjes teaches that the embedded fabrics have a warp consisting of multifilament threads of either polyester or polyamide (column 1, lines 50 – 58). Therefore, one embodiment of Stijntjes' invention is a fabric with a warp of polyester and a weft of polyamide (nylon).

Since Lewis does not teach the composition of the elastomer layer, it would have been necessary for one of ordinary skill in the art at the time the invention was made to provide the details of the specific elastomer used. As polyurethane is a commonly used elastomer specifically in the conveyor belt field, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ polyurethane as suggested by Stijntjes in the invention of Lewis, motivated by the expectation of successfully practicing the disclosed invention.

Since Lewis does not teach the structure of the woven material, it would have been necessary for one of ordinary skill in the art at the time the invention was made to provide the details of the specific woven material used. As polyesters and polyamides provide the proper stiffness thus minimizing breakage of the conveyor, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ polyester as the warp and nylon as the weft as suggested by Stijntjes in the invention of Lewis, motivated by the expectation of successfully practicing the disclosed invention.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 703-305-7082. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jennifer Boyd
February 20, 2003

